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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,527	03/19/2004	Ulrich Bley	DNAG-231.1-CONT-US	7526
24972	7590	07/21/2006	EXAMINER	
FULBRIGHT & JAWORSKI, LLP 666 FIFTH AVE NEW YORK, NY 10103-3198			GELLNER, JEFFREY L	
			ART UNIT	PAPER NUMBER
			3643	

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/804,527

Applicant(s)

BLEY ET AL.

Examiner

Jeffrey L. Gellner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply


A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-33 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ~~15-17 and 18-33~~ is/are allowed.
- 6) ☒ Claim(s) 15-17, 19-33 is/are rejected. 
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of the species combination of nitroguanidine, potassium nitrate, and iron oxide in the reply filed on 10 May 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claim 18 is withdrawn from examination because it is drawn to a non-elected species.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15-17, 19, 22-28, 30, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Butt et al. (US 5,817,972).

As to claims 15-17, 22-25, Butt et al. disclose a method of producing gas generating mixtures (from col. 3 lines 18-30) comprising grinding (from “dry blended together” and “compacted” of col. 3 lines 18-30) a nitrogenous fuel, nitroguanidine (col. 3, lines 49-55); an oxidizing agent, potassium nitrate (col. 4 lines 4-9); and, a passivator, iron oxide (co. 4 lines 19-34), wherein a portion of the oxidizing agent acts a passivator.

As to claim 19, Butt et al. disclose the passivator at from 1 to 15% wt. (col. 4 lines 30-34).

As to claims 26-28, 30, and 31, Butt et al. disclose a gas generating mixture (abstract) of a nitrogen-containing fuel, nitroguanidine (col. 3, lines 49-55); an oxidizing agent, potassium nitrate (col. 4 lines 4-9); and, a passivator, iron oxide (co. 4 lines 19-34) made from the process of claim 15 in that from grinding (from “dry blended together” and “compacted” of col. 3 lines 18-30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20, 21, 29, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butt et al. (US 5,817,972) in view of Jacob et al. (DE 19531130 A1).

As to claim 20, the limitations of claim 15 are disclosed as described above. Not disclosed is the grinding with a ball mill. Jacob et al., however, discloses the use of ball mill to grind a nitroguanidine with iron oxide mixture (top of page 9 of translation in English). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Butt et al. by using a ball mill as disclosed by Jacob et al. so as to use an efficient device to achieve the desired grain size.

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As to claim 21, the limitations of claim 15 are disclosed as described above. Not disclosed is a grain size of <20 micrometers. Jacob et al., however, discloses a mixture of nitroguanidine with iron oxide with a grain size of <20 micrometers (for example, example 2 of page 10 of translation in English). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Butt et al. by having grain size of <20 micrometers as disclosed by Jacob et al. so as to achieve the desired grain size to achieve the proper burn rate.

As to claim 29, the limitations of claim 15 are disclosed as described above. Not disclosed is a grain size of 10 to 15 micrometers. Jacob et al., however, discloses a mixture of nitroguanidine with iron oxide with a grain size of 10 micrometers (example 2 of page 10 of translation in English). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Butt et al. by having grain size of 10 micrometers as disclosed by Jacob et al. so as to achieve the desired grain size to achieve the proper burn rate.

As to claims 32 and 33, Butt et al. disclose a method of producing gas generating mixtures (from col. 3 lines 18-30) comprising grinding (from “dry blended together” and “compacted” of col. 3 lines 18-30) together a nitrogenous fuel, nitroguanidine (col. 3, lines 49-55); a nitrate oxidizing agent, potassium nitrate (col. 4 lines 4-9); and, a passivating friction agent, iron oxide (co. 4 lines 19-34) at 1-15% wt. (col. 4 lines 30-34), to form a intimate homogeneity between the components (from “dry blended together” and “compacted” of col. 3 lines 18-30). Not disclosed the average grain size being less than 20 micrometers. Jacob et al., however, discloses a mixture of nitroguanidine with iron oxide with a grain size of <20

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micrometers (for example, example 2 of page 10 of translation in English). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Butt et al. by having grain size of <20 micrometers as disclosed by Jacob et al. so as to achieve the desired grain size to achieve the proper burn rate.

Conclusion

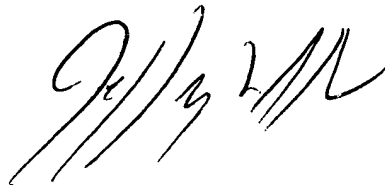
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wilson et al. and Lundstrom disclose in the prior art various mixtures with iron oxide.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571.272.6887. The examiner can normally be reached on Monday-Friday, 8:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'J. L. Gellner', with a stylized flourish at the end.

Jeffrey L. Gellner
Primary Examiner
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